

Supplementary Table S3: *Clostridium perfringens*-associated intestinal diseases in both animals and humans.

| Host species | Disease | Affected groups | Clinical symptoms | Associated toxinotypes/toxins | Refs |
|--------------|--|--|---|--|------|
| Cow | Bovine necrotic enteritis | Neonatal calves | Distended colon; mucosal necrosis | Type A/β2-toxin, perfringolysin O | 1,2 |
| Chicken | Poultry necrotic enteritis | Neonatal chicks 2-5 weeks post-hatching | Gaseous lesions; mucosal necrosis; distended intestines | Type A, C, G/β-toxin, NetB, TpeL | 3 |
| Pig | Swine enterocolitis | 1-7 days old neonatal piglets | Severe diarrhoea, necrotic mucosa, villus atrophy | Type A, C/β2-toxin | 4 |
| Dog | Canine gastroenteritis | n/a | Haemorrhagic/ necrotic intestines | Type A, F/enterotoxin CPE, β2-toxin | 5 |
| Horse | Equine necrotising enterocolitis | 1-14 days old neonatal foals | Bloody diarrhoea; haemorrhagic and necrotic intestines | Type A, F/enterotoxin CPE, β2-toxin, NetE, NetF & NetG | 5 |
| Human | Acute watery diarrhoea (food poisoning) | Both children and adults | 8-14h after food ingestion: intestinal cramp, watery diarrhoea without vomiting (self-limiting: 12-24h) | Type F/enterotoxin CPE | 6 |
| Human | Non-foodborne diarrhoea (antibiotic-associated diarrhoea and sporadic diarrhoea) | Older adults (>60 years old) | Abdominal pain and diarrhoea (prolonged duration >3 days to several weeks), often accompanied by blood in the faeces. | Type F/enterotoxin CPE | 7 |
| Human | Enteritis necroticans (Pigbel) | Children/ malnourished adults | Intestinal gangrene (small intestine as key infection site) | Type C/β-toxin | 8 |
| Human | Pre-term necrotising enterocolitis | 1-14 days old neonatal pre-term infants | Distended abdomen; pneumatosis intestinalis (gas cysts formation); intestinal necrosis | Type A/β2-toxin | 9,10 |

References

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